DETAILED ACTION

Status of Application

1. Acknowledgement is made of applicants' filing of the instant application as a Request for Continued Examination (RCE) under 37 CFR 1.1114.

2. Acknowledgement is made of applicant's filing of amendment/remarks on 04/02/08. By the amendment, claim 19 has been amended and claims 20-22 have been cancelled.

3. Applicant's arguments have been fully considered but they are not deemed to be persuasive. Rejections and/or objections not reiterated from previous office actions are hereby withdrawn. The following rejections and/or objections are either reiterated or newly applied. They constitute the complete set of actions being applied to the instant application.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

4. Claim 19 is rejected under 35 U.S.C. 102(e) as being anticipated by Askew et al. (US 6048861).

Askew teaches the use of composition comprising integrin receptor antagonist, bisphosphonates (e.g., alendronate, pamidronate, risedronate, ibandronate, etidronate, etc...) and a vascular endothelial growth factor inhibitor for the treatment, prevention or inhibition of angiogenesis, macular degeneration, inflammation, diabetic retinopathy, atherosclerosis and tumor growth (abstract; column 34, lines 27-31 and claim 26).

Since the interpretation of the instant claims allow for the inclusion of any other unspecified ingredients even in major amounts in said composition, the reference anticipates the claimed invention.

Although Askew is silent about "embolic treatment of angiogenesis", such feature must be inherently presented in the referenced method of treating, prevention or inhibition of angiogenesis, diabetic retinopathy and tumor growth The prior art directing the administration of bisphosphonates inherently possessing a therapeutic effect for the same ultimate purpose, for the treatment or prevention of angiogenesis, as disclosed by Applicants anticipates Applicants claim even absent explicit recitations of the mechanism of action.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Askew et al. (US 6048861) and further in view of Reszka et al. (US 6416964 B2).

With respect to 1-hydroxy-2-(imidazol-1yl)ethane-1, 1-diphosphonic acid (zoledronic acid),

The teaching of Askew has been discussed in above 35 USC 102(e) rejection. However, Askew is silent about the use of zoledronic acid or zoledronate for the claimed utility.

Reszka teaches zolendronate as functional equivalent of alendronate and pamidronate that is useful in the treatment or prevention of angiogenesis, macular degeneration, inflammation, diabetic retinopathy, atherosclerosis and tumor growth (column 1, lines 16-26; column 1, lines

56-59; column 1, line 65 thru column 2, line 3; column 2, lines 28-48; column 6, lines 32-42; column 7, line 49 thru column 10, line 29).

One having ordinary skill in the art would have been motivated to select the claimed compound with the expectation that substitution of zoldronate for alendronate or pamidronate would not significantly alter the analogous properties of the compound of the reference due to their known functional equivalency in the art. One would have been motivated to combine these references and make the modification because they are drawn to same technical fields (constituted with same ingredients and share common utilities), and pertinent to the problem which applicant concerns about. MPEP 2141.01(a).

Response to Arguments

6. Applicant's arguments filed 04/02/08 have been fully considered but they are not persuasive.

Applicant's argument in the response takes the position that the referenced composition comprising integrin receptor antagonist, bisphosphonate and as vascular endothelial growth factor inhibitor does not anticipate the instant invention. Applicant alleges that the present claim does not allow for inclusion of any other unspecified ingredients.

This argument is not found persuasive because there is no indication in the instant claim that the composition must be essentially consisting of bisphosphonate. Unlike the applicant's argument, the recitation of open transitional language "comprising" allows for the inclusion of any other unspecified ingredients even in major amounts in said composition, thus, the reference anticipates the claimed invention. See MPEP. 2111.03.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988)and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Reszka provides ample motivation to use zolendronate as functional equivalent of alendronate and pamidronate that is useful in the treatment or prevention of angiogenesis, macular degeneration, inflammation, diabetic retinopathy, atherosclerosis and tumor growth. Thus, the cited references in combinations make obvious the instant invention.

Conclusion

7. No Claim is allowed.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian Kwon whose telephone number is (571) 272-0581. The examiner can normally be reached Tuesday through Friday from 9:00 am to 7:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ardin Marschel, can be reached on (571) 272-0718. The fax number for this Group is (571) 273-8300.

Any inquiry of a general nature of relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (571) 272-1600.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications may be obtained from Private PAIR only. For more information about PAIR system, see http://pair-direct.uspto.gov Should you have any questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll free).

/Brian-Yong S Kwon/
Primary Examiner, Art Unit 1614